

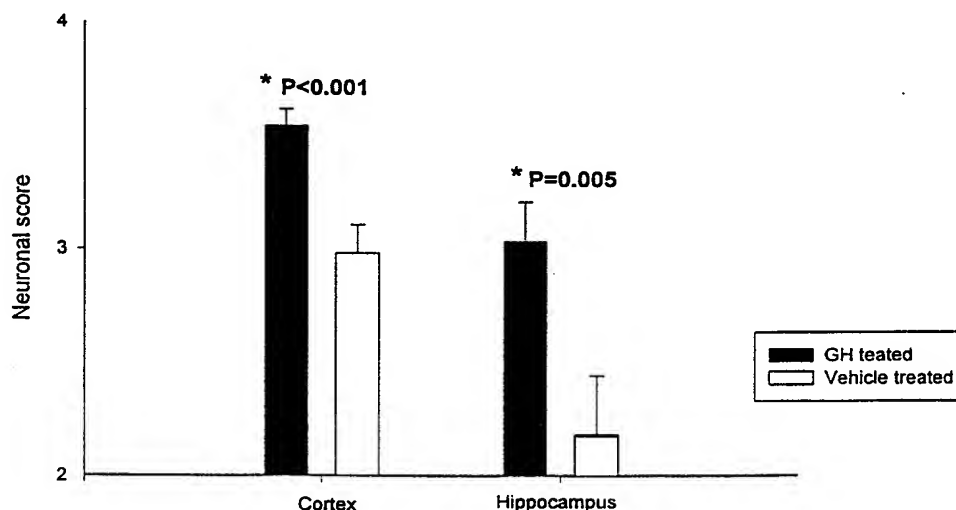


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| (51) International Patent Classification ⁷ : A61K 38/27, 38/25 | | A3 | (11) International Publication Number: WO 00/13650 |
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| (21) International Application Number: PCT/NZ99/00147 (22) International Filing Date: 3 September 1999 (03.09.99) (30) Priority Data: 331719 3 September 1998 (03.09.98) NZ (71) Applicant (for all designated States except US): NEURONZ LIMITED [NZ/NZ]; UniServices House, 58 Symonds Street, Auckland (NZ). (72) Inventors; and (75) Inventors/Applicants (for US only): SCHEEPENS, Arjan [NL/NZ]; 95 Elmore Road, RD3, Albany, Auckland (NZ). WILLIAMS, Chris, Edward [NZ/NZ]; 2/73B Carlton Gore Road, Grafton, Auckland (NZ). GLUCKMAN, Peter, David [NZ/NZ]; 78 Lucerne Road, Remuera, Auckland (NZ). CLARK, Ross, Graham [NZ/NZ]; 25 Glen Road, Devonport, Auckland (NZ). (74) Agents: BENNETT, Michael, Roy et al.; West-Walker Bennett, Mobil on the Park, 157 Lambton Quay, Wellington (NZ). | | (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. (88) Date of publication of the international search report: 2 June 2000 (02.06.00) | |

(54) Title: NEUROPROTECTION

Effect of ICV rat GH treatment on neuronal score following moderate HI



(57) Abstract

The invention relates to neuroprotection and to medicaments for use therein. Neuroprotection is induced by activation of neural growth hormone receptors, primarily using medicaments comprising growth hormone, growth hormone analogs or ligands which are functionally equivalent. Such medicaments may also include one or more secondary neuroprotective agents.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/NZ 99/00147

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| A. CLASSIFICATION OF SUBJECT MATTER | | |
| Int Cl ⁷ : A61K 38/27; 38/25 | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED | | |
| Minimum documentation searched (classification system followed by classification symbols) IPC ⁶ : A61K | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT: BRAIN, GROWTH HORMONE, PROLACTIN, LACTOGEN, IGF-1, GRP, activin, NGF, TGF- β , bfgf | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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| X | WO 94/23754 (THE COMMONWEALTH OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE DEPARTMENT OF HEALTH AND HUMAN SERVICES) 27 October 1994 | 1-17,19,27,28,29 |
| X | JP 2-67223 (DAI ICHI SEIYAKU CO LTD) 7 March 1990 | 1-18 |
| <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex </div> | | |
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| Date of the actual completion of the international search 14 March 2000 | Date of mailing of the international search report 22 MAR 2000 | |
| Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No.: (02) 6285 3929 | Authorized officer A. WILCOX Telephone No.: (02) 6283 2243 | |

INTERNATIONAL SEARCH REPORT

International application No.

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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/NZ 99/00147

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The method of neuroprotection in the brain by administration of growth hormone is not novel. The claims to methods using analogues of growth hormone are considered to be directed to separate inventions. The claims lack special or novel technical features.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/NZ 99/00147

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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